

Title (en)

Flush panel spacer and method and apparatus of installing the same

Title (de)

Versenkter Abstandshalter für Platten sowie Verfahren und Vorrichtung zum Anbringen desselben

Title (fr)

Entretoise encastré pour panneaux, dispositif et procédé de montage d'une telle entretoise

Publication

EP 1300596 A1 20030409 (EN)

Application

EP 02394098 A 20021004

Priority

US 97218201 A 20011005

Abstract (en)

A method of installing an insert in a sandwich panel (100) for mounting a fastener includes making a hole in the panel (100) and inserting a spacer (70) having a height greater than the thickness of the panel (100). An entrance rim (88) of the spacer (70) extends above an upper surface of the panel (100) and a setting tool (28) exerts a force on the entrance rim (88) to force it into the hole and to position an upper edge of the entrance rim (88) flush with the panel surface. The spacer (70) can include an annular groove (84) on an interior wall of the entrance rim (88) to facilitate the cold working deformation during an installation in the panel (100) and a hole engaging surface (80) to align and maintain the spacer (70) within the hole. An outer exterior surface of the entrance rim (88) can be indented and coated with a first sealing compound (74) to ensure a watertight seal with the panel (100). A second sealant material can be provided within the entrance rim (88) for sealing with a head of any fastener extending through the spacer (70). An improved floor panel with spacer is accordingly provided for aircraft. <IMAGE>

IPC 1-7

F16B 5/01

IPC 8 full level

B21D 39/00 (2006.01); **E04C 2/30** (2006.01); **F16B 5/00** (2006.01); **F16B 5/01** (2006.01)

CPC (source: EP US)

F16B 5/01 (2013.01 - EP US)

Citation (applicant)

US 6298633 B1 20011009 - MCCORKLE DANIEL J [US], et al

Citation (search report)

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- [Y] US 4878795 A 19891107 - WOODROW MICHAEL [GB], et al
- [Y] US 3384142 A 19680521 - PHELAN CHARLES S
- [Y] US 4800643 A 19890131 - HIGGINS WILLIAM R [US]

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